AMENDMENTS TO THE SPECIFICATION:

Kindly replace the paragraph beginning at page 7, line 7, with the following amended paragraph:

In addition, the air conditioning equipment according to this invention is characterized by including a first air duct in which the fan and the heat exchanger are installed; a plurality of small holes provided on at least one of the wall of [[a]] any position on the blow side of the fan and a wall of [[a]] any position on the suction side of the fan; and a second air duct linking one of the plurality of small holes and another of the plurality of small holes or linking the plurality of small holes and an opposite side to the suction side or the blow side of the fan on which the plurality of small holes is provided.

Kindly replace the paragraph beginning at page 7, line 15, with the following amended paragraph:

In addition, the air conditioning equipment according to this invention is characterized by including a first air duct in which the fan and the heat exchanger are installed; a large number of small holes provided on one of the wall of [[a]] any position of the blow side of the fan and a wall of [[a]] any position of the suction side of the fan; a small number of big diameter holes provided on the other of the wall of the any position on the blow side of the fan and the wall of the any position on the suction side of the fan; and a second air duct linking the large number of small holes and the small number of big diameter holes.

Kindly replace the paragraph beginning at page 8, line 3, with the following amended paragraph:

In addition, the air conditioning equipment according to this invention is characterized in that the plurality of small holes or the large number of small holes are provided in [[a]] any position near the fan.

Kindly replace the paragraph beginning at page 9, line 5, with the following amended paragraph:

In addition, the fan equipment according to this invention is characterized by a first air duct in which the fan blade is installed; a plurality of small holes provided on at least one of the wall of [[a]] any position on the blow side of the fan blade and a wall of [[a]] any position on the suction side of the fan blade; and a second air duct linking one of the plurality of small holes and another of the plurality of small holes or linking the plurality of small holes and an opposite side to the suction side or the blow side of the fan blade on which the plurality of small holes is provided.

Kindly replace the paragraph beginning at page 9, line 13, with the following amended paragraph:

In addition, the fan equipment according to this invention is characterized by a first air duct in which the fan blade is installed; a large number of small holes provided on one of the wall of [[a]] any position of the blow side of the fan blade and a wall of [[a]] any position of the suction side of the fan blade; a small number of big diameter holes provided on the other of the wall of the any position on the blow side of the fan blade and the wall of the any position on the suction side of the fan blade;

and a second air duct linking the large number of small holes and the small number of big diameter holes.

Kindly replace the paragraph beginning at page 10, line 16, with the following amended paragraph:

In addition, the fan equipment according to this invention is characterized by a fan blade that fans air: an air duct in which the fan blade is installed and through which an acoustic wave propagates; and a ~~passage barrier~~ flow-channel separator installed on at least one of a blow side and a suction side of the fan blade, the ~~passage barrier~~ flow-channel separator including a plurality of small holes, and the ~~passage barrier~~ flow-channel separator formed in [[close]] contact with the air duct on an upstream side and formed so that air blows through a narrow ~~passage~~ flow channel on a downstream side.

Kindly replace the paragraph bridging pages 10 and 11, with the following amended paragraph:

In addition, the fan equipment according to this invention is characterized by including a fan blade that fans air: an air duct in which the fan blade is installed and through which an acoustic wave propagates; and a ~~passage barrier~~ flow-channel separator installed on at least one of a blow side and a suction side of the fan blade, the ~~passage barrier~~ flow-channel separator including a plurality of small holes, and formed in [[close]]contact with the air duct on an downstream side and open on an upstream side.

Kindly replace the paragraph bridging pages 11 and 12, with the following amended paragraph:

Pressure pulsation reduction equipment of refrigeration cycle equipment according to this invention is characterized by including a refrigeration cycle including a compressor; and a pressure pulsation reducer, which is installed on at lease one of a high pressure side and a low pressure side of the refrigeration cycle, the pressure pulsation reducer including a ~~passage barrier~~ flow-channel separator with a plurality of small holes, and the ~~passage barrier~~ flow-channel separator formed open on one end and in [[close]] contact with a ~~passage~~ flow-channel wall on the other end.

Kindly replace the paragraph beginning at page 12, line 3, with the following amended paragraph:

In addition, the pressure pulsation reduction equipment of refrigeration cycle equipment according to this invention is characterized by including a pressure pulsation reducer, which is installed on at lease one of a discharge side and a suction side of the compressor, the pressure pulsation reducer including a ~~passage barrier~~ flow-channel separator with a plurality of small holes, and the ~~passage barrier~~ flow-channel separator formed open on one end and in [[close]] contact with a ~~passage~~ flow-channel wall on the other end.

Kindly replace the paragraph beginning at page 12, line 10, with the following amended paragraph:

In addition, the pressure pulsation reduction equipment of refrigeration cycle equipment according to this invention is characterized by including a pressure

pulsation reducer, which is installed in an oil separator that is incorporated with the compressor, the pressure pulsation reducer including a ~~passage barrier~~ flow-channel separator with a plurality of small holes, and the ~~passage barrier~~ flow-channel separator formed open on one end and in [[close]] contact with the oil separator on the other end.

Kindly replace the paragraph beginning at page 13, line 4, with the following amended paragraph:

In addition, the pressure pulsation reduction equipment of refrigeration cycle equipment according to this invention is characterized in that an open area ratio of the plurality of small holes is up to 10% where the open area ratio is a ratio of a total cross-sectional area of the plurality of small holes to a cross-sectional area of the ~~passage~~ flow-channel wall.

Kindly replace the paragraph beginning at page 13, line 9, with the following amended paragraph:

Pressure pulsation reduction equipment of pump equipment according to this invention is characterized by including a pressure pulsation reducer, which is installed on at lease one of a discharge side and a suction side of the pump equipment, the pressure pulsation reducer including a ~~passage barrier~~ flow-channel separator with a plurality of small holes in a ~~passage~~ flow channel of a medium, and the ~~passage barrier~~ flow-channel separator formed open on one end and in [[close]] contact with a ~~passage~~ flow-channel wall on the other end.

Kindly replace the paragraph beginning at page 14, line 1, with the following amended paragraph:

In addition, the pressure pulsation reduction equipment of pump equipment according to this invention is characterized in that an open area ratio of the plurality of small holes is up to 10% where the open area ratio is a ratio of a total cross-sectional area of the plurality of small holes to a cross-sectional area of the flow-~~passage~~ flow-channel wall.

Kindly replace the paragraph beginning at page 14, line 6, with the following amended paragraph:

A pressure pulsation reduction method of equipment according to this invention is used in equipment in which one of a compressor and pump equipment discharging a medium to a medium ~~passage~~ flow channel is installed. The pressure pulsation reduction method is characterized by including blowing a jet to the medium ~~passage~~ flow channel through a plurality of small holes according to one of a pressure difference between a discharge side and a suction side of the one of a compressor and pump equipment and a pressure difference that occurs in the medium ~~passage~~ flow channel of the one of the compressor and the pump equipment; and sucking in a jet from the medium ~~passage~~ flow channel according to the one of the pressure differences.

Kindly replace the paragraph beginning at page 23, line 11, with the following amended paragraph:

Fig. 5 shows experimental results that confirmed the effect of the noise reduction method of the present invention. More specifically, the figure shows a measured amount of noise reduction in the case of no jet flow existing under the following condition: the perforated plate is installed in a ~~passage~~ flow channel through which noise propagates; a jet flow is supplied to the ~~passage~~ flow channel through the holes of the perforated plate; and the noise frequency and the jet speed are fluctuated. With referring to Fig. 5, the horizontal axis shows the noise frequency and the vertical axis shows the amount of noise reduction. Fig. 5 (1) shows the experimental result of the case where the jet flow is blown out to a field where acoustic waves propagate. Fig. 5 (2) shows the experimental result of the case where the jet flow is sucked in. It should be noted that the speed of the jet flow shown in the figure has the following relation:

Flow speed 1 < Flow speed 2 < Flow speed 3 < Flow speed 4.

Kindly replace the paragraph bridging pages 29 and 30 with the following amended paragraph:

With reference to the figure, when an air conditioning outdoor unit starts operating, inlet air 5 that is sucked in through an air inlet into a housing 3 by the induction effect of a fan 1 is heated and cooled through a heat exchanger 2, and then blown out from the housing 3 as outlet air 6. At an air outlet, a perforated duct including a large number of small holes is installed. Around the perforated duct, a connection duct that is in [[close]] contact with a top panel of the housing 3 is provided. The top panel of the housing 3 includes a small number of big diameter holes, which link to the suction side of the fan. Therefore, the outlet air 6 follows a

pressure difference that is created by the fan and flows from the blow side towards the suction side of the fan through the connection duct 11. This allows reducing noise on the air outlet side with the small holes 9. Such effective noise reduction cannot be expected on the side with the big diameter holes 12. Instead, however, a lower cost configuration may be achieved compared to the case where the small holes are provided on both sides.

Kindly replace the paragraph beginning at page 37, line 21, with the following amended paragraph:

Furthermore, a description has been given here with reference to the case of circulating air by the fan 1 as an example. The same can be applied to other media: water may be circulated by a pump, and ~~refrogeramt~~ refrigerant may be circulated by a compressor, for example.[[.]]

Kindly replace the paragraph beginning at page 38, line 2, with the following amended paragraph.

Fig. 19 is a block diagram of fan equipment illustrating a noise reduction method according to a ninth embodiment. As shown in the figure, a fan duct 10 contains a fan 1 and a ~~passage barrier~~ flow-channel separator 14. The ~~passage barrier~~ flow-channel separator 14 is in [[close]] contact with the fan duct 10 on the upstream side. On the downstream side, it forms into a nozzle so that air blows from the fan 1 through the ~~passage~~ flow channel narrowed a little. Additionally, the ~~passage barrier~~ flow-channel separator 14 contains small holes 9 in large number on the duct wall before the nozzle portion.

Kindly replace the paragraph beginning on page 38, line 10, with the following amended paragraph:

With the cross-sectional shape of the fan duct 10, any shape such as circle or ~~rectangular solid~~ rectangle may be employed. With the cross-sectional shape of the ~~passage barrier~~ flow-channel separator 14, the shape may be the same as or different from that of the fan duct 10.

Kindly replace the paragraph bridging pages 38 and 39, with the following amended paragraph:

When the thus configured fan equipment starts operating, inlet air 5 is sucked in from one side of the fan duct by the inducing effect of the fan 1, and increased in pressure by the fan. Thereafter, at the nozzle portion of the ~~passage barrier~~ flow-channel separator 14, the air is reduced in pressure and then blown out. This results in causing a pressure difference between before and after the nozzle portion of the ~~passage barrier~~ flow-channel separator 14. This causes a pressure difference between both ends of the small holes 9 provided on the duct wall of the ~~passage barrier~~ flow-channel separator 14 before the nozzle portion. This allows air to flow through the small holes 9. The air then meets air that has been blown out from the nozzle, and is blown outside the fan duct 10 as outlet air 6. Therefore, from the same principle as that discussed in the first embodiment, noise propagated from the inflow side of the ~~passage barrier~~ flow-channel separator 14 (including the generated sound of the fan 1) is reduced where the small holes 9 are provided.

Kindly replace the paragraph beginning at page 39, line 3, with the following amended paragraph:

Alternatively, as shown in Fig. 20, the ~~passage barrier~~ flow-channel separator 14 and the small holes 9 may be provided on the suction side of the fan 1. This allows reducing noise propagated to the suction side of the fan. Otherwise, Fig. 19 and Fig. 20 may be incorporated, so that the ~~passage barrier~~ flow-channel separator 14 and the small holes 9 are provided on the suction side and the exit side of the fan. This allows reducing noise propagated to the suction side and the blow side of the fan.

Kindly replace the paragraph beginning at page 40, line 7, with the following amended paragraph:

In addition, a description has been given here with reference to the example where the ~~passage barrier~~ flow-channel separator 14 gradually narrows the air duct so as to blow air through the nozzle. However, this is not the only possibility. An orifice shape is one possibility so as to narrow the ~~passage~~ flow channel abruptly. A projection may be provided at a tip of the nozzle so as to promote flow dispersion. Thus, any shape can be used.

Kindly replace the paragraph bridging pages 40 and 41, with the following amended paragraph:

Fig. 21 is a block diagram of fan equipment illustrating a noise reduction method according to a tenth embodiment. As shown in the figure, a fan duct 10 contains a fan 1 and a ~~passage barrier~~ flow-channel separator 14. The ~~passage~~

~~barrier~~ flow-channel separator 14 is formed to narrow the ~~passage~~ flow channel. The ~~passage barrier~~ flow-channel separator 14 is open on the upstream side and in [[close]] contact with the fan duct 10 on the downstream side. Then, the ~~passage barrier~~ flow-channel separator 14 contains a large number of small holes 9 on the wall surrounding the ~~passage~~ flow channel narrowed.

Kindly replace the paragraph beginning at page 41, line 5, with the following amended paragraph:

When the thus configured fan equipment starts operating, inlet air 5 is sucked in from one side of the fan duct by the inducing effect of the fan 1, and increased in pressure by the fan. Thereafter, the air passes through the ~~passage~~ narrowed flow channel of the ~~passage barrier~~ flow-channel separator 14. This accelerates the flow speed. From Bernoulli's theorem in fluid dynamics, the sum of static pressure and dynamic pressure of a fluid is equal at each point of flow. Dynamic pressure is proportional to squared fluid speed. Therefore, in the ~~passage~~ narrowed flow channel, dynamic pressure occurs depending on the fluid speed. Outside the ~~passage~~ narrowed flow channel, however, there is no airflow and therefore no dynamic pressure occurs. Accordingly, static pressure outside the ~~passage~~ narrowed flow channel is higher than that in the ~~passage~~ narrowed flow channel. Consequently, static pressure at the both ends of the small holes 9 provided around the ~~passage~~ narrowed flow channel is higher outside than inside. This forms a flow through the small holes 9. Then, air blown into the ~~passage~~ narrowed flow channel through the small holes 9 meets air through the ~~passage~~ narrowed flow channel, and is then blown outside from the fan duct 10 as outlet air 6. Therefore, from the same

principle as that discussed in the first embodiment, noise propagated from the inflow side of the ~~passage barrier~~ flow-channel separator 14 (including the generated sound of the fan 1) is reduced where the small holes 9 are provided.

Kindly replace the paragraph bridging pages 41 and 42, with the following amended paragraph:

Alternatively, as shown in Fig. 22, the ~~passage barrier~~ flow-channel separator 14 and the small holes 9 may be provided on the suction side of the fan 1. This allows reducing noise propagated to the suction side of the fan. Otherwise, Fig. 21 and Fig. 22 may be incorporated, so that the ~~passage barrier~~ flow-channel separator 14 and the small holes 9 are provided on the suction side and the exit side of the fan. This allows reducing noise propagated to the suction side and the blow side of the fan.

Kindly replace the paragraph beginning at page 43, line 4, with the following amended paragraph:

With further reference to Fig. 21 and Fig. 22, the ~~passage barrier~~ flow-channel separator 14 is formed into a bell mouth shape on the upstream side. The bell mouth shape is desirable without unwanted pressure damage or hitting sound. However, since a flow through the small holes 9 is the only requirement for noise reduction, any shape can be used for the ~~passage barrier~~ flow-channel separator 14 on the upstream side. A pointed shape is one possibility. A pipe whose diameter is the same as that of the section where the small holes 9 are provided is another possibility.

Kindly replace the paragraph beginning at page 43, line 12, with the following amended paragraph:

In addition, as long as the ~~passage barrier~~ flow-channel separator 14 is in [[close]] contact with the fan duct 10 on the downstream side, any shape can be used for the ~~passage barrier~~ flow-channel separator 14 on the downstream side. For example, a bell mouth or a diffuser is used on the downstream side as well. In this case, pressure recovers on the downstream side of the ~~passage~~ flow channel. This allows reducing overall pressure damage.

Kindly replace the paragraph beginning at page 43, line 17, with the following amended paragraph:

Additionally, a description has been given of the example of using a single nozzle. Alternatively, however, like the case of Fig. 12, a plurality of perforated small ducts may be installed in the ~~passage~~ flow channel. This allows for higher noise reduction.

Kindly replace the paragraph beginning at page 43, line 22, with the following amended paragraph:

Furthermore, a description has been given here with reference to the case of circulating air by the fan 1 as an example. The same can be applied to other media: water may be circulated by a pump, and refrigerant may be circulated by a compressor, for example.[[.]]

Kindly replace the paragraph beginning at page 45, line 5, with the following amended paragraph:

Propagation of this pressure pulsation vibrates the condenser 21, [[an]] a regulator means 23, the evaporator 24, or pipelines connecting these units, thus being the source of noise in the surroundings. Therefore, pressure pulsation means needs to be installed in a ~~passage~~ flow channel near the compressor 20 so as to reduce pressure pulsation.

Kindly replace the paragraph bridging pages 48 and 49, with the following amended paragraph:

Fig. 27 shows experimental results that confirmed the effect of the pressure pulsation reduction method of the present invention. More specifically, the figure shows a measured amount of pressure pulsation reduction in the case of no jet flow existing under the following condition: the perforated plate is installed in a ~~passage~~ flow channel through which pressure pulsation propagates; a jet flow is supplied to the ~~passage~~ flow channel through the holes of the perforated plate; and the frequency of the pressure pulsation and the speed of the jet flow are fluctuated. With referring to Fig. 27, the horizontal axis shows the pressure pulsation frequency and the vertical axis shows the amount of pressure pulsation reduction. Fig. 27 (1) shows the experimental result of the case where the jet flow is blown out to a field where acoustic waves propagate. Fig. 27 (2) shows the experimental result of the case where the jet flow is sucked in. It should be noted that the speed of the jet flow shown in the figure has the following relation:

Flow speed 1 < Flow speed 2 < Flow speed 3 < Flow speed 4.

Kindly replace the paragraph beginning at page 49, line 11, with the following amended paragraph:

With further reference to Fig. 23 discussed earlier, on the discharge side of the compressor 20 in the refrigeration cycle, pressure pulsation reduction means 30 to which the aforementioned mechanism is applied is installed. The pressure pulsation reduction means 30 contains a ~~passage barrier~~ flow-channel separator 14, which is formed to narrow the ~~barrier~~ flow channel. The ~~passage barrier~~ flow-channel separator 14 is open on the upstream side and in [[close]] contact with the surrounding wall on the downstream side. Then, the ~~passage barrier~~ flow-channel separator 14 contains a large number of small holes 9 on the wall surrounding the ~~passage~~ narrowed flow channel.

Kindly replace the paragraph bridging pages 49 and 50, with the following amended paragraph:

When the thus configured refrigeration cycle equipment starts operating, a fluid flowing into the pressure pulsation reduction means 30 passes through the ~~passage~~ narrowed flow channel of the ~~passage barrier~~ flow-channel separator 14. This accelerates the flow speed of the fluid. From Bernoulli's theorem in fluid dynamics, the sum of static pressure and dynamic pressure of a fluid is equal at each point of flow. Dynamic pressure is proportional to squared fluid speed. Therefore, in the ~~passage~~ narrowed flow channel, dynamic pressure occurs depending on the fluid speed. Outside the ~~passage~~ narrowed flow channel, however, there is no flow and therefore no dynamic pressure occurs. Accordingly, static pressure outside the ~~passage~~ narrowed flow channel is higher than that in the

~~passage~~ narrowed flow channel. Consequently, static pressure at the both ends of the small holes 9 provided around the ~~passage~~ narrowed flow channel is higher outside than inside. This forms a flow through the small holes 9. Then, the fluid blown into the ~~passage~~ narrowed flow channel through the small holes 9 meets a fluid through the ~~passage~~ narrowed flow channel, and is then discharged from the pressure pulsation reduction means 30.

Kindly replace the paragraph beginning at page 52, line 5, with the following amended paragraph:

With further reference to Fig. 23, Fig. 28, and Fig. 29, the ~~passage barrier~~ flow-channel separator 14 is formed into a diffuser on the upstream side. However, a flow through the small holes 9 is the only requirement for noise reduction. Thus, a pipe whose diameter is the same as that of the section where the small holes 9 are provided is one possibility, for example.

Kindly replace the paragraph beginning at page 52, line 10, with the following amended paragraph:

In addition, a description has been given with the example of using the diffuser on the downstream side of the ~~passage barrier~~ flow-channel separator 14 for pressure recovery. This is not the only possibility. Any shape is possible if part of the downstream side is in contact with the surrounding wall.

Kindly replace the paragraph beginning at page 52, line 14, with the following amended paragraph:

In addition, a description has been given of the example of using a single nozzle. Alternatively, however, the configuration may include a plurality of perforated small ducts installed in the ~~passage~~ flow channel. This allows for higher pressure pulsation reduction.

Kindly replace the paragraph bridging pages 52 and 53 with the following amended paragraph:

In addition, the pressure pulsation reducer 30 may be applied to pump equipment as shown in Fig. 31 through Fig. 34. In this case, the pressure pulsation of a medium such as water or brine that flows through a ~~passage~~ flow channel can be reduced. The operation of this case will not be discussed here in detail, since it is the same as that of the refrigeration cycle equipment.

Kindly replace the paragraph bridging pages 53 and 54, with the following amended paragraph:

With referring to the figure, a ~~passage barrier~~ flow-channel separator 14 in the pressure pulsation reduction means 30 is in [[close]] contact with the surrounding wall of the oil separator 43 on the upstream side. The ~~passage barrier~~ flow-channel separator 14, on the downstream side, is formed into a nozzle so as to blow a fluid through a ~~passage~~ narrowed flow channel. Then, small holes 9 are provided on the duct wall of the ~~passage barrier~~ flow-channel separator 14 before the nozzle portion. Such a configuration allows a fluid flowing into the pressure pulsation reduction means 30 to be reduced in pressure at the nozzle portion of the ~~passage barrier~~ flow-channel separator 14 and then blown out. This causes a pressure difference

between before and after the nozzle portion of the ~~passage barrier~~ flow-channel separator 14. Consequently, a pressure difference exists between the ends of the small holes 9 provided on the duct wall of the ~~passage barrier~~ flow-channel separator 14 before the nozzle portion. This forms a flow through the small holes 9. Thus, from the same principle as that referred to earlier, the pressure pulsation propagated from the inflow side of the ~~passage barrier~~ flow-channel separator 14 is reduced at the section where the small holes 9 are provided.

Kindly replace the paragraph beginning at page 54, line 6, with the following amended paragraph:

The ~~passage barrier~~ flow-channel separator 14 in the pressure pulsation reduction means 30 may alternatively be formed such that it is open on the upstream side, in [[close]] contact with a cylindrical member that extends from the oil separator 43 and encloses the ~~passage barrier~~ flow-channel separator 14, for example, on the downstream side, and includes small holes 9 in a large number.